



Small Projects Day, Section 1: Project Proposal Information

1. **Responsible Official:** Martina Barnes, Manchester District Ranger
2. **Project Name:** South Fork of the Roaring Branch Stream Restoration Project
3. **Project Location:** Towns of Sunderland and Glastenbury, Bennington County, Vermont
4. **Project Contact:** Scott Wixsom, 802-362-2307 x7219, scott.wixsom@usda.gov

5. **Purpose and Need** (Why here? Why now? Why is the outcome desired?):

The South Fork of the Roaring Branch, like many of the perennial streams on the Forest, suffers from a lack of large, instream wood, or large wood (LW). Large wood in streams is critical to creating diverse stream habitats for fish, amphibians, and aquatic insects. Restoring stream function through the addition of large wood is also a goal of the 2006 Forest Plan. The purpose of this project is to meet Forest Plan Objectives for desired stream habitat conditions by restoring stream function and processes and improving aquatic habitat associated with instream large wood.

LW greatly influences stream function, channel morphology and aquatic habitats. Using the stream's natural flow regime, woody debris stores, sorts, and distributes sediment; creates habitat features such as pools and riffles; adds habitat diversity; and provides cover. LW also traps and retains organic matter that is consumed by aquatic organisms and adds nutrients to the aquatic ecosystem. A great variety of fish and insect species occupy the pools and riffles created by large instream wood.

6. **Project Description** (What will we be doing? How will we do it? Where is the project located?):

The proposal consists of LWD placement on up to approximately 2.1 miles of stream where chainsaws will be used to directionally fell and position trees from the adjacent streamside. Large wood additions will increase instream wood densities to between 75 and 130 trees per mile (greater than 12 inches diameter), and 100 pieces per mile (8 to 12 inches in diameter) as indicated in Forest Plan goals and objectives.

The project is 1.8 miles upstream from the eligible Roaring Branch Recreational River corridor and 2.0 miles from the confluence of the Roaring Branch.



7. Forest Plan Management Area:

Diverse Backcountry

8. Forest Plan Compliance (How does this project comply with the Land & Resource Management Plan (Forest Plan) direction?):

The proposal is consistent with MA direction for Diverse Backcountry.

2.2.2 Goals and Objectives

Fisheries Objectives:

Goal 6: Maintain or restore ecological processes and systems on the GMNF within desired ranges of variability, including a variety of native vegetation and stream channel types, and their patterns and structural components.

Objective: Restore and enhance stream ecosystem processes using knowledge of riparian/floodplain functions and large woody debris (LWD) dynamics for the purpose of improving and connecting aquatic habitats, such as those for wild trout and Atlantic salmon, promoting stream stability and sediment and organic matter storage, or to increase stream productivity. Stream habitat should be managed to provide:

- LWD quantities between 75 and 130 pieces >12 inches diameter per mile of stream
- Approximately 100 pieces between 8 to 12 inches diameter per mile of stream

9. Exclusion Category:

36 CFR 220.6(e)(7): Modification or maintenance of stream or lake aquatic habitat improvement structures using native materials or normal practices.

10. Expected Implementation Date: October 2021

